

IN THE CLAIMS:

Please enter the claims as follows:

1. (Previously Presented) A monolithic optical component comprising:
a light-absorbing layer,
a waveguide coupled evanescently with the said light-absorbing layer, such waveguide having one end coupled with an input face of the component to receive an input wave, and
the component being characterized in that the input face is convex.
2. (Previously Presented) The optical component according to claim 1, wherein the input face has the shape of a cylindrical diopter with generators perpendicular to the plane of the light-absorbing layer.
3. (Previously Presented) The optical component according to claim 2, wherein the radius of curvature of the cylindrical diopter is of the order of 20 μm .
4. (Previously Presented) The optical component according to claim 1, further comprising a photodiode incorporating the light-absorbing layer.
5. (Previously Presented) The optical component according to claim 1, wherein the waveguide is a diluted waveguide.
6. (Previously Presented) The optical component according to claim 1, wherein the waveguide comprises at least:
a first InP layer,
an InGaAsP layer deposited on the first InP layer, and
a second InP layer deposited on the InGaAsP layer.
7. (Previously Presented) The optical component according to claim 1, wherein the shape of the input face is formed by an etching process.

8. (Previously Presented) The optical component according to claim 2, wherein the cylindrical diopter shape of the input face is formed by utilizing a deposition of materials and a photosensitive resist.
9. (Previously Presented) The optical component according to claim 7, wherein the deposition of materials comprises a layer of silicon nitride.
10. (Previously Presented) The optical component according to claim 7, wherein the deposition of materials comprises a layer of silicon dioxide.
11. (Previously Presented) A monolithic optical component comprising:
a photodiode; and
a waveguide coupled evanescently to the photodiode via a light-absorbing layer, the waveguide having one end coupled with an input face that is configured to receive an input wave, wherein the input face is convex.
12. (Previously Presented) The optical component according to claim 11, wherein the shape of the input face is formed by an etching process.
13. (Previously Presented) The optical component according to claim 11, wherein the input face has the shape of a cylindrical diopter.
14. (Previously Presented) The optical component according to claim 11, wherein the cylindrical diopter shape of the input face is formed by utilizing a deposition of materials and a photosensitive resist.
15. (Previously Presented) The optical component according to claim 11, wherein the waveguide is a diluted waveguide.
16. (Previously Presented) A monolithic optical component comprising:
a photodiode; and

a waveguide coupled to the photodiode via a light-absorbing layer, the waveguide having one end coupled with an input face that is configured to receive an input wave, wherein the input face is formed by utilizing a deposition of materials and a photosensitive resist such that the input face has a shape of a cylindrical diopter.

17. (Previously Presented) The optical component according to claim 16, wherein the waveguide comprises an InP layer and an InGaAsP layer.

18. (Previously Presented) The optical component according to claim 17, wherein the InGaAsP layer has a thickness of 0.16 μm .

19. (Previously Presented) The optical component according to claim 16, wherein the cylindrical diopter is a convex convergent cylindrical diopter.

20. (Previously Presented) The optical component according to claim 16, wherein the waveguide is a diluted waveguide.